

Claims:

1. A process for producing a polyester resin having a resin acid value not higher than 120 mg KOH/g, a hydroxyl value not higher than 120 mg KOH/g and a number-average molecular weight within a range of 2,000-30,000, the process being characterized by concurrently reacting a polyester whose chief starting material is terephthalic acid and which has been recovered from waste materials and regenerated, a polyhydric alcohol component and a polybasic acid component, at such ratios that the regenerated polyester occupies 10-80% by weight, based on the total weight of said regenerated polyester, the polyhydric alcohol component and the polybasic acid component.
2. A process according to Claim 1, in which said polyester whose chief starting materials is terephthalic acid and which has been recovered from waste materials and regenerated is recycled polyethylene terephthalate.
3. A process according to Claim 1, in which the polyhydric alcohol component is selected from a group consisting of glycerine, trimethylolpropane, ethylene glycol, neopentyl glycol and 1,4-dimethylolcyclohexane.
4. A process according to Claim 1, in which the polybasic acid component is a dibasic acid or a C₁-C₆ alkyl ester thereof.
5. A process according to Claim 1, in which the reaction is carried out at such ratios that the regenerated polyester occupies 20-70% by weight, based on the total weight of said regenerated polyester, the polyhydric alcohol component and the polybasic acid component.
6. A process according to Claim 1, in which the reaction is carried out in the presence of a depolymerization catalyst.
7. A process according to Claim 1, in which the produced polyester resin has a resin acid value within a range of 2-80 mg KOH/g, a hydroxyl value within a range of 2-80 mg KOH/g and a

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number-average molecular weight within a range of 2,500-10,000.

8. A process according to Claim 1, in which the chloroform-insoluble component of the produced polyester resin is not more than 1.0%.

9. A paint composition containing a polyester resin which is produced by a process according to any one of Claims 1-8.

10. A paint composition according to Claim 9, which is a powder coating composition.

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